



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

TWO DIMENSIONS OF PRODUCTIVITY—DISCUSSION

E. DANA DURAND.—Professor Taylor's methods and results are exceedingly interesting. One would wish to know, however, whether the returns for the individual man are typical. If they represent a single year's business only, the relative figures for the different men might be greatly affected by accidental circumstances, such as exceptionally high or low prices for particular crops, exceptionally favorable or unfavorable weather for particular crops. Of course if all the men were engaged in practically the same type of farming and affected alike by the conditions, the results even of a single year would be fairly comparable.

(In answer to this Professor Taylor stated that the figures related to a single year but that the university proposed to keep up the system in the same community for a series of years to get more typical results. He also stated that the farmers were largely engaged in substantially similar farming operations.)

A. A. YOUNG.—Professor Taylor has again made us his debtors for a study of a kind all too rare, in which the results of painstaking statistical research and of careful consideration of some fundamental problems of economic theory are brought together to illuminate each other. If time permitted I should want to dwell longer on the value and significance of Professor Taylor's work. But Professor Taylor has proffered his paper as merely a tentative formulation of his own conclusions, and has invited suggestions. So it will be better, I suppose, to confine myself to certain minor points where I do not feel quite certain about Professor Taylor's interpretation of the meaning of his figures.

I do not imagine that Professor Taylor meant to be taken quite literally when he said that his "two dimensions of economic productivity," capacity and efficiency, "are as different as length and breadth." At any rate, these two variables do not seem to me to be wholly independent. Professor Taylor's index of efficiency is "product per dollar of outlay," and this, for each farmer, may be viewed as an *average*. Now the good farmer and the poor farmer alike have to encounter the fact of diminishing productivity. The particular phase of the principle of diminishing productivity which is important here is not that which we set in the foreground when we analyze the way in which the amount of the product or yield per unit which has to be imputed to any one sort of productive agent diminishes as more units of that particular agent are combined with a given equipment of other

productive agents. For the general theory of distribution this is undoubtedly the most significant aspect of the matter. But for certain other purposes,—especially the theory of the size of the business unit,—our emphasis has to be put on the diminishing yield of *any or all* of the different productive agents when utilized in connection with any one enterprise or business scheme. Here we must think, not of labor as “applied to land,” but of labor and land and other productive agents as being used together, in larger or smaller amounts, in some one money-getting enterprise.

The farmer who gets a larger yield per dollar from the specific amount of expenditures he finds it most profitable to make than some other farmer gets from the (different) amount of expenditure which happens to be, for him, the most profitable amount, is not necessarily, by all standards, the more efficient farmer of the two. It may be that the second farmer’s expenditures and product are much larger than the first’s; it may be that if he farmed on as small a scale as the first farmer his product per dollar of outlay would be larger; it may be that for this reason he can push his expenditures further before coming to the no-profit margin; it may be, also, that this is precisely why his actual product, per dollar of outlay, becomes smaller than that of the first farmer. The ability to get a larger yield from a given amount of resources may be the underlying cause of larger “capacity,” and this may show itself in a lower degree of “efficiency,” as defined by Professor Taylor. High “efficiency” may thus sometimes merely be the result of a relatively steep curve of diminishing productivity.

I do not attach a great deal of weight to this point, because Professor Taylor’s figures do not suggest an inverse correlation between “efficiency” and “capacity,” and, further, because they indicate a higher degree of direct correlation between the “residuum for the farmer’s effort” and “efficiency” than between this residuum and “capacity.”

I am not quite clear about the basis of Professor Taylor’s conclusion that “the result of competition tends to put the most efficient cows into the hands of the most efficient dairymen and the marginal cows into the hands of the marginal dairymen.” I don’t doubt the fact. But I can’t see that it follows from Professor Taylor’s figures for “efficiency.” Isn’t this problem a matter, not of average problem per unit of outlay, but of specific product at the no-profit margin?

J. G. THOMPSON.—Professor Taylor has asked for suggestions with reference to the use of terms, or otherwise. I would say that his

usage of the term "capacity" seems to me somewhat open to objection, although I can see what he has in mind in using the word as he does. In ordinary usage "capacity" is very closely related to "efficiency"—the very word or term over against which he is attempting to set the former. Would it be possible to use the word "intake" instead? This would seem to express fully the idea that Professor Taylor has in mind and would at the same time be free from the objection of partial identification with the term or word with which it is meant to be contrasted.

Professor Young has suggested that these figures from Professor Taylor's tables may give a wrong impression with regard to efficiency, since a man with the ability to handle a great number of productive units and thus with a slowly declining curve of efficiency may show, by this standard, less efficiency per unit than a man of small ability, whose efficiency falls away very rapidly after the first few units and who therefore commands only a few units, with a relatively high average efficiency for the units commanded. But, from the community point of view, at least, efficiency would seem to be properly interpreted by Professor Taylor's tables. For it is evident that it is more to the advantage of the community to have the productive units effectively used in small amounts by many men of smaller capacity than to have a few men of great ability for large enterprises command so great a number of units that there is a serious impairment of the productivity of the last units utilized and thus low average productivity per unit as a whole. There would appear to be, too, a tendency for these men of smaller ability to win over, from the abler men, the control of these additional units that cannot be used so productively by the latter, because the former can make them yield more and can therefore pay more for their control than can the latter. Competition tends to bring this result about, and it would seem to be desirable from the community point of view.

FRANK A. FETTER.—The Chairman has asked what the economic theorists may think of the possibility of learning from the agricultural economists. Speaking for one, I would say it is not the first time we have been under obligations to Professor Taylor, as well as to other agricultural economists. Years ago, as a contributor to the newer doctrine of rent, he earned a right to our respectful attention and to our gratitude. He has helped to show that the abstractions and generalizations regarding land, presented a hundred years ago in England, under very different conditions, have little application to the practical problems of our own day. The students of economic theory will do

well to heed on the one hand the work of the agricultural economists, and on the other hand the work of the cost accountants and statisticians. These men, who are studying the concrete facts of our environment, are doing effective work, from which economic theory may learn vital lessons. The sessions on economic theory in this association have sometimes been filled with lamentations at the lack of progress in the subject. There are some pessimists among us who seem to think that the only good economic theorists are dead economic theorists. But such sessions as that of this morning and as the present one, give encouraging evidence that we are seeking economic theory not so much in the dusty volumes of Ricardo and Mill as in the living pages of our own times. In studying the actual conditions around us we are finding new conceptions, a new terminology, and a new economic philosophy, at once more logical and more fitted to our needs than are those of the English school.